SunEdison
simplifying solar

Davis Montham Air Force Base

Alternative Energy Solutions Task Force

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Agenda

- Who is SunEdison
- Solar Basics
- State of the Industry
- Why Solar PV?

The SunEdison Biz

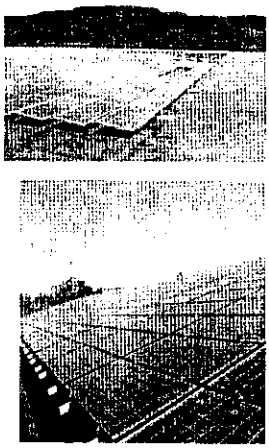
Founded in 2003 to:
- Make solar a meaningful worldwide energy source
- Deliver electricity at or below existing retail prices

The first provider to offer solar energy as a turn-key service
- No capital outlays
- No impact on existing services
- No ongoing customer maintenance costs

The largest solar energy service provider in North America
- Over 30MWs of 100% renewable electricity installed
- Predictable electricity prices over a 20 year term

A nationwide business operating across North America
- 250+ employees
- 5 offices in California, Colorado, New Jersey and Maryland

Turn-key, Predictable, Proven, Renewable Energy

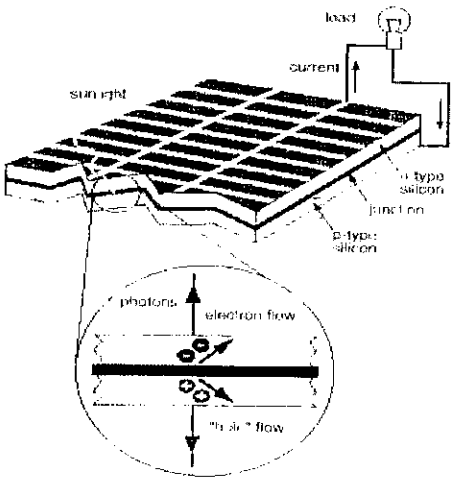


A PV (Photo Voltaic) Cell

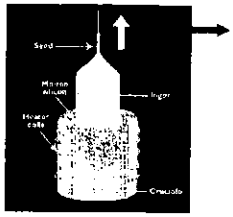
- Thin wafers of silicon
  - Similar to computer chips
  - Much bigger, much cheaper
- Silicon is abundant (sand)
  - Currently short supply
  - Non-toxic, safe (Si, but others not as benign)
- Light carries energy into cell
- Cells convert sunlight energy into electric current- they do not store energy
- Sunlight is the "fuel"

How a PV Cell Works

- Light knocks loose electrons from atoms
- Freed electrons have extra energy, or "voltage"
- Internal electric field pushes electrons to front of cell
- Electric current flows on to other cells or to the load
- Cells never "run out" of electrons

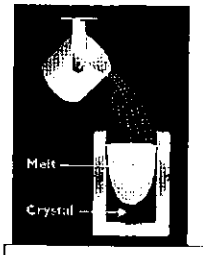


Types of PV Cells



Single Crystal Silicon

Thin Film



Poly-Crystal

Ribbon Silicon